



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,574	08/30/2001	Georges Smits	MALD RAFF.16 CON2	2537

7590

12/17/2002

Hayes, Soloway, Hennessey, Grossman & Hage, P.C.
175 Canal Street
Manchester, NH 03101

EXAMINER

OWENS JR, HOWARD V

ART UNIT

PAPER NUMBER

1623

DATE MAILED: 12/17/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,574

Applicant(s)

SMITS ET AL.

Examiner

Howard V Owens

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-12, 15-26, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) 13, 14 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1 ☐ Certified copies of the priority documents have been received.
- 2 ☐ Certified copies of the priority documents have been received in Application No. _____.
- 3 ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Reference to Continuing Applications

This application filed under 37 C.F.R. § 1.62 lacks the necessary reference to the prior application. A statement reading "This is a Continuation of application Serial No. 08/765,874, filed 5/27/1997, now U.S. Patent No. 6,303,778" should be entered following the title of the invention or as the first sentence of the specification.

Objection to the specification

The use of the trademark RAFTILINE has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Abstract Objected to: Minor Informalities

The abstract is objected to for the abbreviation DP. The term should be set initially fully as "degree of polymerization" before an abbreviation is used. Appropriate correction is required.

Art Unit: 1623

Claim Objections 13, 14, 27

Claims 13, 14 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Double Patenting

Claim Rejections - 35 USC § 101

35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

Claims 1, 3-5 and 8 are rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 2-6 and 8 of prior U.S. Patent No. 6,303,778 ('778). This is a double patenting rejection.

Claim 1, 3-5 and 8 are identical in scope to claims 2-6 of '778. The process for producing a fractionated polydisperse inulin composition of claim 1 wherein the particles are separated from the solution and washed is set forth in claim 2 of '778. The scope of the limitations set forth in claims 3-5 and 8 is identical to the limitations set forth in claims 3-6 of '778.

Nonstatutory Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d

Art Unit: 1623

1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2, 7 and 9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7 and 9 of U.S. Patent No. 6,303,778. An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the reference claim(s) because the examined claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 2, 7 and 9 are generic to all that is recited in claims 7 and 9 of U.S. Patent No. 6,303,778. That is, claims 2, 7 and 9 of U.S. Patent No. 6,303,778 ('778) fall entirely within the scope of claims 2, 7 and 9 or, in other words, claims 2, 7 and 9 are anticipated by claims 2, 7 and 9 of '778. The washing step of claim 2 of '778 would inherently include washing with water set forth in instant claim 2. Instant claims 7 and 9 limit the process for producing a fractionated polydisperse inulin composition, wherein the native polydisperse inulin is native chicory inulin or fractionated chicory inulin and the rapid cooling is between 15° C and 25° C at a rate between 1° C and 7° C/sec., respectively. The use of native chicory inulin or fractionated chicory inulin or modifying the temperature and rate of cooling were

Art Unit: 1623

limitations that were present in claims 7 and 9 of '778, before the particles were crystallized, similarly, the same modifications were present in claims 7-9 of the instant claims prior to crystallization.

Claim Rejections – 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12, 15-26, 28 and 29 are rejected under 35 U.S.C. 103 over Kunz et al. (Kunz), U.S. Patent No. 5,478,432.

Claims 1-12, 15-26, 28 and 29 are drawn to a fractionated polydisperse fructan composition having an avg. degree of polymerization (DP) double or higher than the avg. DP of native polydisperse carbohydrate, containing essentially no monomers, dimers and oligomers; wherein said composition is included in pharmaceutical, cosmetical food and/or feed compositions.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1623

Kunz teaches a polydisperse fractionated fructan composition in the form of inulin (crude inulin= chicory) wherein the DP is >20 , and is virtually free from monomers, dimers and oligomers (DP $<10-12$) (columns 3 – 7). Kunz teaches that the benefit of fructan/inulin compositions with longer DP profiles is that any mono-, di- or oligosaccharides present in an inulin compositions give undefined product mixtures whose purifications are problematic, tend to be hygroscopic and do not promote the neutral flavor demonstrated in long chain inulins (column 1, lines 33-47).

Applicant admits in the specification it is already known in the art to use fructan compositions containing inulin in pharmaceutical, cosmetic, food and feed products, thus the use of the fructan/inulin composition for these purposes would be obvious to one of skill in the art. Kunz verifies this as it teaches the use of inulin compositions of the invention in foodstuffs and pharmacological active substances (col. 4, lines 51-57).

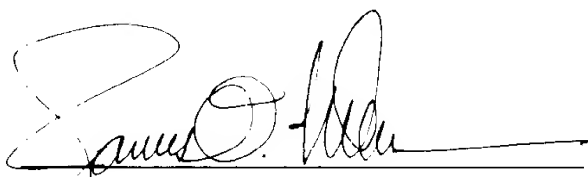
Kunz does not specifically teach the technical specifications of less than .2 wt% ash, no detectable alcohol, however, Kunz does teach that after separation of the monomers, dimers and oligomers, the inulin composition is subjected to further purification procedures which promote lowered ash and alcohol content such as strong acid cation exchange resins, ultrafiltration and drying which would certainly promote the ash and alcohol specifications claimed by applicant.

It would have been prima facie obvious to produce a fructan composition having an avg. degree of polymerization (DP) double or higher than the avg. DP of native polydisperse carbohydrate, containing essentially no monomers, dimers and oligomers.

One of skill in the art would have been motivated to produce such a composition given the prior art's recognition that mono-, di- or oligosaccharides present in an fructan/inulin compositions give undefined product mixtures whose purifications are problematic, tend to be hygroscopic and do not promote the neutral flavor demonstrated in compositions comprising primarily long chain inulins ($>DP\ 20$).

Art Unit: 1623

Howard V. Owens
Patent Examiner
Art Unit 1623

A handwritten signature in dark ink, appearing to read "James O. Wilson", is written over a horizontal line.

James O. Wilson
Supervisory Patent Examiner
Technology Center 1600

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard Owens whose telephone number is (703) 306-4538 . The examiner can normally be reached on Mon.-Fri. from 8 30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the Supervisory Patent Examiner signing this action, James O. Wilson can be reached on (703) 308-4624 . The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.